

# MI Transfer Pathways: Are they Affordable and Navigable for Michiganders?

August 2024



## Introduction

A highly functioning and equitable transfer pipeline can help students to lower college costs and minimize student debt, boost student readiness for upper-level college coursework, and enable students to complete and get credit toward a four-year degree for all passed courses (importantly, the credits transfer but the specific grades start fresh upon enrollment in the next degree program). These benefits are crucial for students and families who seek to pursue postsecondary credential attainment for upward economic mobility, especially for students who may believe postsecondary education is out of reach. Messaging and advising from K-12 professionals and other influential adults often encourages these students to enroll at their local community colleges, secure in the belief that they are making smart and affordable decisions.<sup>i</sup> While that can be true, unfortunately it is not the outcome for many students.<sup>ii</sup>

Some states have stronger statewide credit transfer arrangements while others leave agreements to the institutions themselves.<sup>iii</sup> In both cases, students must navigate a complex maze of policies and practices across multiple institutions. This patchwork system helps explain why less than a quarter of students who enter community colleges with the explicit intention to move on to a four-year degree successfully transfer.<sup>iv</sup> For students who do manage to transfer, they are likely to lose at least some credit upon transferring, costing them completed coursework, potentially extending their time to a bachelor's degree, and raising the overall cost of their education.<sup>v</sup> Mirroring other longstanding equity gaps in education, the students most frequently lost in this leaky pipeline are Black, Hispanic, low-income, and returning adult students over the age of 25.<sup>vi</sup>

Students too often find themselves on the front lines fighting to get credit for completed coursework and that counts toward their degree program. The state can play a key role in pushing forward effective, student-centered policies, including fostering strong and respectful relationships between institutions and the state, crafting credit transfers guarantees, creating clear and easy to navigate pathways between institutional courses and programs, and working to support student graduation as efficiently as possible.<sup>vii</sup>

Michigan, like many states nationally, has had mixed outcomes on successful student transfer, transfer student retention, and graduating students that take the transfer route.<sup>viii</sup> It has opted for a largely institution-led transfer system, where state transfer policy is predominantly determined by institutions of higher education and what best serves their interests.<sup>ix</sup> These institutional agreements are not always student-centered and result in an inconsistent maze of varying institutional processes, especially for students who might be considering different degree options or transfer destinations.<sup>x</sup> Creating a more consistent system would improve student communication and advising, open up more avenues to students, and result in a fairer system. The new Michigan Department of Lifelong Education, Advancement, and Potential (MiLEAP) offers an excellent opportunity to address these issues, creating more seamless and affordable pathways to a college degree for Michigan's students and families. By examining national context and highlighting the current efforts in Michigan, this primer aims to create a starting point for MiLEAP to steer conversations and strategies for state investments supporting the improvement of the transfer pipeline within the state.

## National Context

### Transferring in Theory vs. Transferring in Reality

Students may choose to enroll at a community college for many reasons, and community colleges are vital access points for a wide variety of students by design. Students may not be ready or admissible at 4-year colleges, they may be interested in a particular program or need a particular course that they cannot access elsewhere, they may need to remain local or attend part-time given personal and familial dynamics, and/or they may be looking for a way to save money. No matter the reason, all students should feel confident that if they start their education at a community college, they will be able to successfully transfer their credits to another institution via a simple process if they want to do so. Additionally, for students who enter a community college planning to complete prerequisites or an associate degree to transfer to a 4-year institution towards a bachelor's degree, it should be possible for them to graduate within four years.

### How Students and Families Believe Transfer Pathways Work

Issue Areas	Student Examples	Student Next Steps	Expected Outcomes
<b>Academic/ Admission barriers</b>	Students did not academically perform, did not have access to rigorous coursework to be competitive applicants into a 4-year or were not admitted into 4-year institutions.	Students enroll in a 2-year institution to improve their academic standing to complete a postsecondary credential and/or to become more admissible into 4-year institutions.	Students are able to enroll at 4-year institutions and apply all credits earned at the 2-year towards a 4-year degree.
<b>Readiness/Exposure Barriers</b>	Students are unaware of the value and opportunities of postsecondary credentials or have not developed the skill or confidence for successful postsecondary pursuit.	Students are encouraged to attend 2-year and trade pathway programs to explore their options and earn credits towards degrees of interest once ready.	Students apply and enroll in 2-year and trade programs with the hopes that if desired they could transfer to 4-year programs using the credits earned towards their programs of interest.
<b>Affordability Barriers</b>	Students positioned to believe that college cost is too expensive with or without scholarships and that they need cheaper alternatives.	Students complete their course credits at a lower cost at 2-year or skilled trade programs that they can then transfer to a 4-year institution to complete their studies in another 2 years.	Students can apply the credits earned from 2-year or trade programs towards credential programs at 4-year institutions, which lowers overall cost.
<b>Familial/ Employment Barriers</b>	Students need to stay close to home to help/support family, have dependents that limits options of pursuit, and/or need to work around their work schedule for continued education.	Students enroll at their nearest institution to earn credits towards their anticipated programs.	Students can transfer credits earned towards their degree or institution of choice if/when they are able.

Many view transfer as a one-to-one system, e.g., that every year completed in community college or credit bearing programs is one year closer to obtaining a 4-year degree. **Despite this broadly assumed notion, that completing two years at a community college means a student only needs two years at a 4-year institution for a bachelor's degree, the data shows that only 18 percent of students who successfully transfer graduate in four years.**<sup>xi</sup> Lack of clarity and the increasing complexity of transfer processes increases a student's likelihood of losing credits or taking unnecessary courses, contributing to confusion and frustration along with additional cost, which in turn may lead to students stopping or dropping out of school.<sup>xii</sup>

Often institutions rely on articulation agreements, an understanding of which credits will transfer between institutions, to clarify and facilitate transfers. Even where articulation agreements exist and appear clear, students routinely report losing credits for completed coursework in the process.<sup>xiii</sup> This may happen due to the structure of articulation agreements (such as 2+3 programs, which require two years at a community college plus three years at a 4-year institution) or a change in curriculum and/or faculty for previously aligned courses.<sup>xiv</sup> Some institutions, particularly those that are more selective, have caps on the number of credits a student can transfer or block students from transferring certain credits due to concerns about the "rigor" or compatibility of prior coursework.<sup>xv</sup> Students may also accumulate excess credits for unavoidable reasons, including changing their major or preferred transfer destination.<sup>xvi</sup> All too often, however, this is not made clear to students as they embark on their journeys.

Often, these challenges are exacerbated if a student fails to meet with an academic advisor at both institutions, which can be difficult due to high caseloads and high turnover in advising positions.<sup>xvii</sup> Students who meet regularly with only a community college advisor risk a lack of understanding and alignment at the receiving 4-year institution.<sup>xviii</sup> This can lead to students misunderstanding whether credits will transfer.<sup>xix</sup> Students are then left to advocate for themselves and petition departments to recognize credits or simply retake them.<sup>xx</sup>

Finally, when credits do transfer to a 4-year institution, there is no guarantee they will count towards the student's desired degree.<sup>xxi</sup> In some instances, institutions accept credits but will not apply them towards their degree requirements, requiring excess credits and time to achieve a degree.<sup>xxii</sup> These issues make clear why it is important for strong and respectful partnerships to maximize the number of credits students can transfer and make the transfer process as simple and transparent as possible.<sup>xxiii</sup>

### Transfer Student Outcomes: Enrollment and Completion

In Fall 2023, transfer students made up 13.2 percent of all continuing and returning undergraduates, a 5.3 percent growth from the previous year.<sup>xxiv</sup> Transfer enrollment increased across all pathways and especially among upward transfers (going from a 2-year to a 4-year institution), which grew by 7.7 percent between 2022 and 2023.<sup>xxv</sup> These upward transfers were more likely to be in more selective institutions.<sup>xxvi</sup> Furthermore, a growing share of transfer enrollment was made up of historically underrepresented students, including low-income, Black, Hispanic, and rural students.<sup>xxvii</sup>

Transfer students who successfully navigate the system do well. Some studies have found no difference between transfer students' and their peers' academic post-transfer performances. Transfer students are as likely as their counterparts who start at 4-year institutions to persist after one year and to graduate with a bachelor's degree.<sup>xxviii</sup> Another study found more than 80 percent of students who transfer to a selective 4-year institution continue after the first year.<sup>xxix</sup> There is also some evidence that students who earn an associate degree or certificate before transferring have higher post-transfer outcomes than their peers who transferred before completing a degree or credential. As of 2024, 67 percent of transfer students who earn a degree or credential before continuing to a 4-

## MI Transfer Pathways: Are they Affordable and Navigable for Michiganders?

year institution earn a bachelor's degree, compared to 42 percent of students who transfer prior to earning a credential.<sup>xxx</sup>

However, the findings on transfer student completion are generally mixed. A 2024 study by the Aspen Institute and Community College Research Center, using National Student Clearinghouse data, found that only about half of students who transfer from a community college complete a bachelor's degree within 4 years of transferring.<sup>xxxii</sup> These completion rates are even lower for historically underrepresented students.<sup>xxxii</sup> This means students who can transfer may be as successful as their peers once they reach the 4-year university, but they might also need additional help transitioning to the 4-year institution. Stronger ties between institution partnerships and clear pathways for transferring could help to address any difficulties students face once they transfer.<sup>xxxiii</sup>

### Transfer Student Outcomes: Cost Savings

"You can save money by starting at a community college..." This is popular advice on how to lower the cost of college, but is it true? Generally, the direct costs of attending a community college are lower due to lower tuition costs, while other educational expenses (e.g. housing, food, transportation etc.) are similar across 2-year and 4-year colleges.<sup>xxxiv</sup> The total costs, however, tick up when students lose credits in the transfer process and have to repeat courses at the more expensive 4-year rates.<sup>xxxv</sup> Further, the costs of common disruptions in a student's educational pathway are often not accounted for, including changing courses of study, taking courses that do not count toward a degree, failing courses, and/or becoming so discouraged and frustrated by the system that the student decides to stop pursuing a bachelor's degree altogether.<sup>xxxvi</sup>

Studies that have evaluated the cost savings associated with starting at a 2-year versus a 4-year institution have mixed results that are greatly impacted by individual state systems, students becoming discouraged from completing their degree, and the transferability of credits.<sup>xxxvii</sup> One study found that in the scenarios where students start at community colleges with moderately strong, discipline-specific transfer pathways and can transfer most of their credits (defined as losing less than 20 credits in the transfer process), students save a moderate amount of money (about \$2,240).<sup>xxxviii</sup> Others have found that students starting at a 2-year institution garnered less loan debt but were less likely to complete their degree.<sup>xxxix</sup> In short, it is difficult when accounting for credit loss and challenges faced by prospective transfer students—which may ultimately lead to them not completing a degree at all—to definitively state that starting at a community college costs less than a 4-year institution.

### Transfer Student Outcomes: Attempted Solutions

Often, it falls on students to figure out how to navigate this complex system and to consistently advocate for themselves to receive the credit they are due.<sup>xl</sup> When students need to retake classes, they risk running out of financial aid. These students may need to borrow funds, work more hours, or do without, putting them in a precarious financial situation.<sup>xli</sup> This may further lead to students wanting to stop and drop out, contributing to lower enrollments and the high number of individuals with some college and no degree.<sup>xlii</sup>

A 2024 analysis of transfer outcomes summed up the national transfer issue, stating: "Nationally, transfer pathways to four-year institutions from community colleges produce low transfer and bachelor's completion rates for students, especially for low-income, Black, and other populations underrepresented among bachelor's degree holders."<sup>xliii</sup> In short, the ideal transfer pathway continues to remain just that: an ideal. While some states have stronger outcomes than other, none have solved the transfer problem.<sup>xliv</sup>

## MI Transfer Pathways: Are they Affordable and Navigable for Michiganders?

To address transfer issues, states have adopted a myriad of potential solutions to try to maximize credit transfers between institutions.<sup>xlv</sup> These solutions often aim to articulate a clearer and more robust pathway for students to follow to easily transfer their credits from a 2-year to a 4-year and graduate with a bachelor's degree. The table below outlines some popular transfer policies. It is important to note that many states have adopted more than one of these policies. As of 2022, 20 states have a common course numbering system, 38 states have a set of lower-level courses that are transferable to all public institutions, 35 states have a guaranteed transferable associate degree, and 25 states allow for reverse transfers.<sup>xlvi</sup> Only 10 states, including MI, predominantly rely on institutional articulation agreements to facilitate student transfer.<sup>xlvii</sup> Unlike MI, several of those states (e.g., Vermont, Montana, New Hampshire), have very few institutions, while several others have large systems that help to coordinate transfer at a system level (e.g., California, New York, Minnesota).

### Popular Policy Prescriptions<sup>xlviii</sup>

Policy	Definitions	States
<b>Common Course Numbering</b>	Develops a uniform numbering system used across public universities and colleges for lower division courses.	AZ, AR, CO, FL, ID, IN, KS, LA, MN, MO, NV, NM, NC, ND, OR, SD, TN, TX, UT, WY
<b>Transferable Core of Lower Division Courses</b>	Creates a set of general education courses that are transferable across all public institutions.	AL, AK, AZ, AR, CA, CO, FL, GA, HI, ID, IL, IN, KS, KY, LA, MD, MA, MS, MO, MT, NV, NJ, NM, NC, ND, OH, OK, OR, PA, SC, SD, TN, TX, UT, VA, WA, WV, WI
<b>Guaranteed Transfer of an associate degree, or "2 + 2" Programs</b>	Guarantees students who complete an associate degree can transfer all their credits to a public 4-year and be granted junior status.	AR, CO, FL, GA, HI, ID, IL, IN, IA, KS, KY, LA, ME, MD, MA, MS, MO, NV, NJ, NM, NC, OH, OK, OR, PA, RI, SC, SD, TN, UT, VA, WA, WV, WI, WY
<b>Reverse Transfer</b>	Allows public 4-year institutions to retroactively confer an associate degree to students who did not complete their degree before transferring.	AL, CO, FL, HI, IL, IA, KS, LA, ME, MD, MA, <b>MI</b> , MS, MO, NV, NJ, OH, OR, PA, RI, TN, TX, WA, WV, WI
<b>Institutional Articulation Agreements</b>	Leaves the development of transfer agreements to the discretion of the institutions. All states use some level of institutional agreement, however, for some states this is the primary form of transfer policy.	CA, CT, DE, <b>MI</b> , MN, MT, NE, NH, NY, VT

These policies have reaped mixed results, possibly because of competing policies, nuances in implementation, and continued disconnection within the system.<sup>xlix</sup> Some research suggests the simple presence of an articulation agreement does not boost the transfer rate or preservation of credits between community college and 4-year institutions, nor does it improve bachelor's degree attainment. States with less structured articulation agreements may even have a negative impact on transfer rates.<sup>i</sup> Other studies have found that a lack of counseling, early planning, and communication about the rules of articulation agreements make transfer policies less effective.<sup>li</sup> These complications may be worsened by misinformation from varying student support and advising personnel.<sup>lii</sup> As a result, it can be extremely difficult for students to determine the best pathway for their aspirations and how to use transfer pathways as efficiently as possible. Equitable transfer policies, however, would have real benefits if

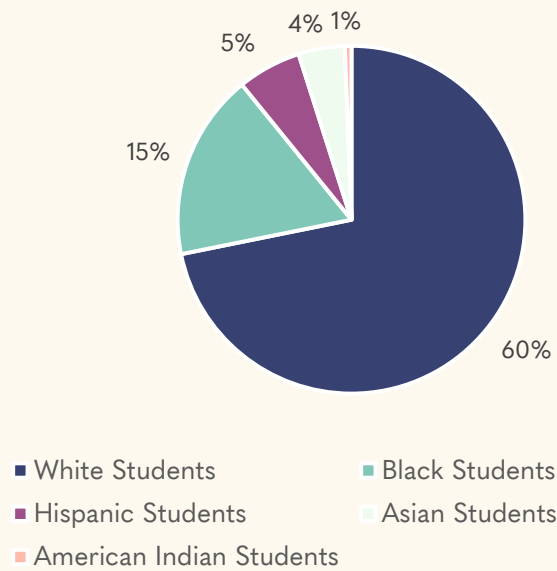
efforts were better structured and coordinated, especially between 2-year and 4-year institutions, by taking these learning outcomes into consideration when designing and implementing policies.

Michigan Context

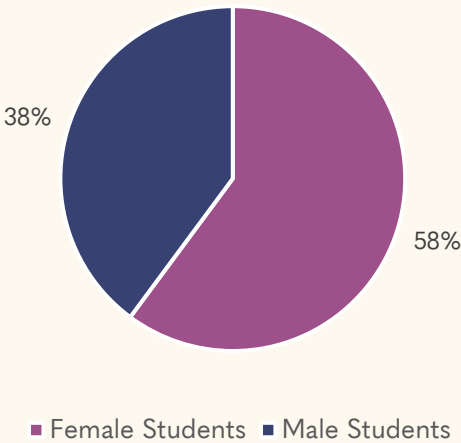
Transferring in Michigan

According to MI School Data, the official education data source for the state of Michigan, 27,860 students transferred from 2-year institutions during the 2022-23 school year.<sup>liii</sup> Of these, about 60 percent were White, 15 percent were Black, 5 percent were Hispanic, 4 percent were Asian, and 1 percent were American Indian.<sup>liv</sup> Over half of these transfer students identified as female.<sup>lv</sup> The demographics of students who transferred from Michigan 2-year institutions in 2022-2023 are depicted in the charts below.

Students Who Transferred from Michigan 2-year Institutions in 2022-2023 by Race (n=23,355)



Students Who Transferred from Michigan 2-year Institutions in 2022-2023 by Gender (n=26,907)



Data Source: MI School Data. College Transfer: 2022-2023 Data. Retrieved 2024.  
<https://www.mischooldata.org/college-transfer/>

As of 2024, the percentage of MI students who transfer from a community college and successfully complete a bachelor’s degree is 55 percent at public 4-year institutions (National average, 57 percent) and 28 percent at a private, non-profit independent 4-year institutions (National average, 44 percent).<sup>lvi</sup> Michigan ranks 8<sup>th</sup> nationally for the percentage of community college students that continue their education after transferring to a public 4-year institution (84 percent).<sup>lvii</sup> Conversely, it comes in dead last for students who persist after transferring to a private, non-profit 4-year institution (67 percent).<sup>lviii</sup> Michigan’s 4-year institutions have mixed performance in retaining and graduating Black, Hispanic, low-income, and adult transfer students. The tables below illustrate these outcomes.<sup>lix</sup>



## MI Transfer Pathways: Are they Affordable and Navigable for Michiganders?

### Transfer to 4-year Public Institutions<sup>lx</sup>

Student Group	Retention (National Average)	Michigan Retention	Michigan Retention Rank (National)	BA Completion (National Average)	Michigan BA Completion	Michigan BA Completion Rank
Black	77%	77%	15 <sup>th</sup>	42%	34%	23 <sup>rd</sup>
Hispanic	85%	80%	25 <sup>th</sup>	59%	50%	16 <sup>th</sup>
Low-Income	80%	80%	15 <sup>th</sup>	52%	50%	17 <sup>th</sup>
Adult (Age 25+)	78%	77%	12 <sup>th</sup>	49%	42%	29 <sup>th</sup>

### Transfer to 4-year Private Institutions<sup>lxii</sup>

Student Group	Retention (National Average)	Michigan Retention	Michigan Retention Rank (National)	BA Completion (National Average)	Michigan BA Completion	Michigan BA Completion Rank
Black	67%	51%	35 <sup>th</sup>	29%	12%	36 <sup>th</sup>
Hispanic	78%	66%	32 <sup>nd</sup>	46%	24%	33 <sup>rd</sup>
Low-Income	73%	61%	41 <sup>st</sup>	38%	23%	37 <sup>th</sup>
Adult (Age 25+)	74%	65%	41 <sup>st</sup>	38%	24%	40 <sup>th</sup>

Michigan's transfer policies are predominantly led and determined by institutions rather than the state.<sup>lxii</sup> There are two efforts created by MI institutions to better streamline and create clarity for prospective transfer students: the MI Transfer Agreement and MI Transfer Pathways. The MI Transfer Agreement, developed in 2014, allows students to transfer 30 general education credits from community college to public universities.<sup>lxiii</sup> This, however, is a voluntary opt-in agreement; Michigan institutions are not required to participate. Therefore, it is critical for students planning to transfer to check their institution's participation, articulation agreements, and partnerships early on as credit transfer is not guaranteed.

MI Transfer Pathways are agreements between 2-year institutions and public and private 4-year institutions that identify specific courses at 2-year colleges that transfer to 4-year institutions within 10 areas of study, including: art, biology, business, communication, criminal justice, exercise science, mechanical engineering, psychology, public health, and social work.<sup>lxiv</sup> Not all institutions participating in the MI Transfer Agreement take part in the MI Transfer pathways.<sup>lxv</sup> These policies are difficult to distinguish from each other, which may also be confusing for students to understand and navigate.

Both the MI Transfer Agreement and the MI Transfer Pathway were designed to ease the transfer process for students while recognizing the autonomous nature of individual institution participation. This means that if a student wants to learn how their credits will transfer between specific institutions, they must spend a significant amount of time navigating the MI Transfer Network website, looking at the varied policies across institutions, and discerning the specific agreement arrangements, which are far from simple or easy to navigate. Additionally, the

information on the Transfer Network website is largely dependent on consistent, accurate data and updates being manually entered by college-based staff. Finally, even when the Transfer Network website information is available, students are often redirected to individual institutional sites, in essence starting the research process over and leading to confusion.

In short, despite making attempts to streamline transfer pathways for students, navigating transfer agreements in Michigan still takes significant time, effort, and patience from the student. The multitude of different articulation agreements between colleges are highly individualized, demanding students fully study each one across all programs and institutions of interest. The new MiLEAP has the potential to act as a neutral intermediary between institutions, help improve articulation agreements, and provide students and families with transparent messaging about navigating the transfer process.

### Student and Advisor Stories

To get the best sense of how the current transfer process is impacting students, we contacted several students and student-serving professionals. Collectively, they uplifted that while ideally transferring could be a successful pathway for many students, the reality is much more complicated. Some major themes that emerged from these conversations were:

- **Barriers to transferring credits**
  - Credit loss
  - Transferred credits not counting towards a degree
- **A lack of statewide guidance on transfer policies**
  - Difficulties in course matching across institutions
  - Changing institutional policies
  - Other states' policies provide clearer pathways for students and families, potentially making the transfer process easier to navigate. Ohio, for example, has statewide policies articulating a transferable set of lower division courses, guaranteed transfer of a two-year degree to a 4-year institution, and reverse transfer.<sup>lxvi</sup>
- **The affordability aspect of transferring**
  - Starting at a two-year institution starts the clock on financial aid and limits the amount of aid that can then be used at the next institution
  - Saving money may depend on time and the number of credits that transfer
- **Counseling on transfer**
  - Mixed messaging
  - Lack of holistic supports



MI Transfer Pathways: Are they Affordable and Navigable for Michiganders?

Impact of Current Transfer System

Students	K-12 Teachers & Higher Academic Advisors	Higher Education Institutions	State & Workforce
<ul style="list-style-type: none"><li>• Informed starting at a 2-year can help save money</li><li>• Policies and agreements are too confusing with high variation between programs and institutions</li><li>• May lack consistent advising support navigating transfer aspirations</li><li>• Waste time and money in courses that don't transfer or don't count towards a degree</li><li>• Discouraged from completing a degree</li></ul>	<ul style="list-style-type: none"><li>• Transfer system is too complex to support students in finding the best path for their goals</li><li>• Limited professional development opportunities on how to advise students that may need to pursue transfer pathways</li><li>• Must update course information for any credit-bearing courses in the MI Transfer Network and wait for evaluation by 4-years to assure transferability between institutions</li><li>• Expected to understand these complexities for advising while balancing more pressing responsibilities of day-to-day tasks</li></ul>	<p><b>2-years:</b></p> <ul style="list-style-type: none"><li>• Try to convince 4-year institutions of the quality of their courses/programs</li><li>• Maximize the transferability of credits to 4-year institutions</li><li>• Have limited resources and capacity to manage effectively</li></ul> <p><b>4-years:</b></p> <ul style="list-style-type: none"><li>• Are guided by individual departments and faculty evaluations which may not always complement admission and completion efforts</li><li>• Are incentivized to take as few transfer credits as possible to maintain financial health and reputation of rigorous education</li></ul>	<p><b>End up with:</b></p> <ul style="list-style-type: none"><li>• More individuals with "some college, no degree"</li><li>• More individuals with student debt without the credentials to help pay off that debt</li><li>• Not enough skilled workers to meet workforce needs</li><li>• Institutions with lower completion and success rates</li><li>• Additional barriers to meeting college attainment goals.</li></ul>

Building on these themes, below are quotes from one student and one advisor who shared their thoughts on the current state of Michigan transfer pathways.

*"A student may believe they are on a fast, economical track; to find out they have missed a course that was required and could then cause a retake or no MTA [Michigan Transfer Agreement] stamp on their 2-year transfer agreement. Between that and [potentially relying on] predatory lenders to pay for 4 years once they (transfer students) finish two, and finally [hoping] that the degrees will equate to a wage that is equitable next to cost of attainment."*

—Michigan Student

*"The transfer process is always a bit difficult, especially for first-generation students and students of a lower socioeconomic status. There aren't many clear pathways for students, and they wind up having to navigate it much on their own. The Michigan Transfer Agreement is a helpful tool, but there are many classes that won't transfer to specific institutions and students lose credits in the transfer process. But ultimately many of these students get lost in the 2-year process and stop attending school during their time in a 2-year."*

—Michigan Advisor

### Improving Transfer in Michigan

Some Michigan institutions are doing their part to streamline education opportunities for students. Henry Ford College and the University of Michigan-Dearborn have partnered to develop Learn4ward, a new articulation agreement that allows students who begin their education at Henry Ford College to be granted automatic admission to University of Michigan-Dearborn (after completing certain qualifications) and seamlessly transfer their credits.<sup>lxvii</sup> This will allow students to graduate with an associate and bachelor's degree within 4-6 years, closely aligning with the ideal transfer pathway. Other institutions (like Eastern Michigan University<sup>lxviii</sup>, Northwestern Michigan College, Lake Superior State University)<sup>lxix</sup> have built off this model and developed similar partnerships. While these partnerships are a step in the right direction,<sup>lxx</sup> Michiganders need a strong, state-led policy shift to push other institutions towards these well-designed models.

Charged with overseeing the state's higher education policies and developing education partnerships, MiLEAP is well positioned to review current state transfer pathways, identify areas for improvement, and consult experts from the field as to the best way to move forward. The agency could also:

- Use roadblocks and barriers identified by students and practitioners to target system improvements that will be most effective in helping students successfully navigate transfer.
- Coordinate and streamline strategy discussions, development, and support needed for better system connectivity and alignment that fosters transitional matriculation through education levels (e.g. community college to 4-year institutions).
- Create incentive-based support and funding models to encourage and uplift institutional partnerships that help improve the transfer pipeline.
- Identify recommended best practices with aligned resources to encourage systemic change in areas that are most lucrative for Michigan's approach to postsecondary pursuit.
- Develop guidelines on institutional policies which help improve student transfer and provide reviews of the efficacy of these policies.

**Successful transfer is a key piece of the puzzle for college affordability and completion, and ultimately for driving increased educational attainment and a more competitive economy across the state. Transfer improvements are within reach for Michigan and MiLEAP is perfectly positioned to make progress. It is only through thoughtful statewide coordination that all Michiganders will have access to the high-quality educational opportunities they deserve.**

### Endnotes

<sup>i</sup> Binkley, Collin. "'Waste of Time': Community college transfers derail students'. *The Associated Press*. (2023). <https://apnews.com/article/bachelor-degree-community-college-transfer-credits-cec0154f260c130fbbfcb593de77e4da>

Carlson, Scott. "The Transfer Maze: How systematic snags too often block the path from community college to a bachelor's degree". *The Chronicle of Higher Education*. (2023). <https://www.chronicle.com/article/the-transfer-maze>

Community College Research Center. Tracking Transfer: State-by-State Outcomes. (Accessed 2024). <https://ccrc.tc.columbia.edu/tracking-transfer-state-outcomes.html>

Giani, Matt. The Correlates of Credit Loss: How Demographics, Pre-Transfer Academics, and Institutions Relate to the Loss of Credits for Vertical Transfer Students. *Research in Higher Education*. (2019).

## MI Transfer Pathways: Are they Affordable and Navigable for Michiganders?

Hodara, Michelle, Mary Martinez-Wenzl, David Stevens, and Christopher Mazzeo. Exploring Credit Mobility and Major-Specific Pathways: A Policy Analysis and Student Perspective on Community College to University Transfer. *Community College Review*. (2017).

Sotherland, Nathan, Kevin Stange, and Jordan Matsudaira. New Measures of Postsecondary Education Transfer Performance: Transfer-out rates for community colleges, transfer student graduation rates at four-year colleges, and the institutional dyads contributing to transfer student success. *Department of Education: Homeroom*. (2023). <https://blog.ed.gov/2023/11/new-measures-of-postsecondary-education-transfer-performance-transfer-out-rates-for-community-colleges-transfer-student-graduation-rates-at-four-year-colleges-and-the-institutional-dyads-contributi/>

Velasco, Tatiana, John Fink, Mariel Bedoya, Davis Jenkins, Tania LaViolet. Tracking Transfer: Four-Year Institutional Effectiveness in Broadening Bachelor's Degree Attainment. *Community College Research Center and Aspen Institute*. (2024). [https://highered.aspeninstitute.org/wp-content/uploads/2024/02/CCRC-ASP-NSCRC-TT-4Y-Report\\_Final.pdf](https://highered.aspeninstitute.org/wp-content/uploads/2024/02/CCRC-ASP-NSCRC-TT-4Y-Report_Final.pdf)

Whinnery, Erin and Lauren Peisach. 50-State Comparison: Transfer and Articulation Policies. *Education Commission of the States*. (2022). <https://www.ecs.org/50-state-comparison-transfer-and-articulation/>

<sup>ii</sup> Binkley, Collin. "Waste of Time': Community college transfers derail students'. *The Associated Press*. (2023). <https://apnews.com/article/bachelor-degree-community-college-transfer-credits-cec0154f260c130fbbfcb593de77e4da>

Carlson, Scott. "The Transfer Maze: How systematic snags too often block the path from community college to a bachelor's degree". *The Chronicle of Higher Education*. (2023). <https://www.chronicle.com/article/the-transfer-maze>

Community College Research Center. Tracking Transfer: State-by-State Outcomes. (Accessed 2024). <https://ccrc.tc.columbia.edu/tracking-transfer-state-outcomes.html>

Giani, Matt. The Correlates of Credit Loss: How Demographics, Pre-Transfer Academics, and Institutions Relate to the Loss of Credits for Vertical Transfer Students. *Research in Higher Education*. (2019).

Hodara, Michelle, Mary Martinez-Wenzl, David Stevens, and Christopher Mazzeo. Exploring Credit Mobility and Major-Specific Pathways: A Policy Analysis and Student Perspective on Community College to University Transfer. *Community College Review*. (2017).

Sotherland, Nathan, Kevin Stange, and Jordan Matsudaira. New Measures of Postsecondary Education Transfer Performance: Transfer-out rates for community colleges, transfer student graduation rates at four-year colleges, and the institutional dyads contributing to transfer student success. *Department of Education: Homeroom*. (2023). <https://blog.ed.gov/2023/11/new-measures-of-postsecondary-education-transfer-performance-transfer-out-rates-for-community-colleges-transfer-student-graduation-rates-at-four-year-colleges-and-the-institutional-dyads-contributi/>

Velasco, Tatiana, John Fink, Mariel Bedoya, Davis Jenkins, Tania LaViolet. Tracking Transfer: Four-Year Institutional Effectiveness in Broadening Bachelor's Degree Attainment. *Community College Research Center and Aspen Institute*. (2024). [https://highered.aspeninstitute.org/wp-content/uploads/2024/02/CCRC-ASP-NSCRC-TT-4Y-Report\\_Final.pdf](https://highered.aspeninstitute.org/wp-content/uploads/2024/02/CCRC-ASP-NSCRC-TT-4Y-Report_Final.pdf)

Whinnery, Erin and Lauren Peisach. 50-State Comparison: Transfer and Articulation Policies. *Education Commission of the States*. (2022). <https://www.ecs.org/50-state-comparison-transfer-and-articulation/>

<sup>iii</sup> Giani, Matt. The Correlates of Credit Loss: How Demographics, Pre-Transfer Academics, and Institutions Relate to the Loss of Credits for Vertical Transfer Students. *Research in Higher Education*. (2019).

Hodara, Michelle, Mary Martinez-Wenzl, David Stevens, and Christopher Mazzeo. Exploring Credit Mobility and Major-Specific Pathways: A Policy Analysis and Student Perspective on Community College to University Transfer. *Community College Review*. (2017).

Schudde, Lauren, Huriya Jabbar, Eliza Epstein, and Elif Yucel. Students' Sense Making of Higher Education Policies During the Vertical Transfer Process. *American Educational Research Journal*. (2021). <https://journals.sagepub.com/doi/pdf/10.3102/00028312211003050>

<sup>iv</sup> Hodara, Michelle, Mary Martinez-Wenzl, David Stevens, and Christopher Mazzeo. Exploring Credit Mobility and Major-Specific Pathways: A Policy Analysis and Student Perspective on Community College to University Transfer. *Community College Review*. (2017).

Schudde, Lauren, Huriya Jabbar, Eliza Epstein, and Elif Yucel. Students' Sense Making of Higher Education Policies During the Vertical Transfer Process. *American Educational Research Journal*. (2021). <https://journals.sagepub.com/doi/pdf/10.3102/00028312211003050>

Sotherland, Natan, Kevin Stange, and Jordan Matsudaira. New Measures of Postsecondary Education Transfer Performance: Transfer-out rates for community colleges, transfer student graduation rates at four-year colleges, and the institutional dyads contributing to transfer student success. *Department of Education: Homeroom*. (2023). <https://blog.ed.gov/2023/11/new-measures-of-postsecondary-education-transfer-performance-transfer-out-rates-for-community-colleges-transfer-student-graduation-rates-at-four-year-colleges-and-the-institutional-dyads-contributi/>

Velasco, T., Fink, J., Bedoya-Guevara, M., Jenkins, D., & LaViolet, T. (2024). Tracking Transfer: Community College and Four-Year Institutional Effectiveness in Broadening Bachelor's Degree Attainment. *Community College Research Center*. <https://ccrc.tc.columbia.edu/publications/Tracking-Transfer-Community-College-and-Four-Year-Institutional-Effectiveness-in-Broadening-Bachelors-Degree-Attainment.html>

## MI Transfer Pathways: Are they Affordable and Navigable for Michiganders?

<sup>v</sup> Hodara, Michelle, Mary Martinez-Wenzl, David Stevens, and Christopher Mazzeo. Exploring Credit Mobility and Major-Specific Pathways: A Policy Analysis and Student Perspective on Community College to University Transfer. *Community College Review*. (2017).

Giani, Matt. The Correlates of Credit Loss: How Demographics, Pre-Transfer Academics, and Institutions Relate to the Loss of Credits for Vertical Transfer Students. *Research in Higher Education*. (2019).

Schudde, Lauren, Huriya Jabbar, Eliza Epstein, and Elif Yucel. Students' Sense Making of Higher Education Policies During the Vertical Transfer Process. *American Educational Research Journal*. (2021). <https://journals.sagepub.com/doi/pdf/10.3102/00028312211003050>

Witteveen, Dirk and Paul Attewell. The Vertical Transfer Penalty among Bachelor's Degree Graduates. *The Journal of Higher Education*. (2020). <https://www.tandfonline.com/doi/pdf/10.1080/00221546.2019.1609323>

<sup>vi</sup> Giani, Matt. The Correlates of Credit Loss: How Demographics, Pre-Transfer Academics, and Institutions Relate to the Loss of Credits for Vertical Transfer Students. *Research in Higher Education*. (2019).

Sotherland, Nathan, Kevin Stange, and Jordan Matsudaira. New Measures of Postsecondary Education Transfer Performance: Transfer-out rates for community colleges, transfer student graduation rates at four-year colleges, and the institutional dyads contributing to transfer student success. *Department of Education: Homeroom*. (2023). <https://blog.ed.gov/2023/11/new-measures-of-postsecondary-education-transfer-performance-transfer-out-rates-for-community-colleges-transfer-student-graduation-rates-at-four-year-colleges-and-the-institutional-dyads-contributi/>

Velasco, Tatiana, John Fink, Mariel Bedoya, Davis Jenkins, Tania LaViolet. Tracking Transfer: Four-Year Institutional Effectiveness in Broadening Bachelor's Degree Attainment. *Community College Research Center and Aspen Institute*. (2024). [https://highered.aspeninstitute.org/wp-content/uploads/2024/02/CCRC-ASP-NSCRC-TT-4Y-Report\\_Final.pdf](https://highered.aspeninstitute.org/wp-content/uploads/2024/02/CCRC-ASP-NSCRC-TT-4Y-Report_Final.pdf)

<sup>vii</sup> Schudde, Lauren, Huriya Jabbar, Eliza Epstein, and Elif Yucel. Students' Sense Making of Higher Education Policies During the Vertical Transfer Process. *American Educational Research Journal*. (2021). <https://journals.sagepub.com/doi/pdf/10.3102/00028312211003050>

Sotherland, Nathan, Kevin Stange, and Jordan Matsudaira. New Measures of Postsecondary Education Transfer Performance: Transfer-out rates for community colleges, transfer student graduation rates at four-year colleges, and the institutional dyads contributing to transfer student success. *Department of Education: Homeroom*. (2023). <https://blog.ed.gov/2023/11/new-measures-of-postsecondary-education-transfer-performance-transfer-out-rates-for-community-colleges-transfer-student-graduation-rates-at-four-year-colleges-and-the-institutional-dyads-contributi/>

Velasco, Tatiana, John Fink, Mariel Bedoya, Davis Jenkins, Tania LaViolet. Tracking Transfer: Four-Year Institutional Effectiveness in Broadening Bachelor's Degree Attainment. *Community College Research Center and Aspen Institute*. (2024). [https://highered.aspeninstitute.org/wp-content/uploads/2024/02/CCRC-ASP-NSCRC-TT-4Y-Report\\_Final.pdf](https://highered.aspeninstitute.org/wp-content/uploads/2024/02/CCRC-ASP-NSCRC-TT-4Y-Report_Final.pdf)

Whinnery, Erin and Lauren Peisach. 50-State Comparison: Transfer and Articulation Policies. *Education Commission of the States*. (2022). <https://www.ecs.org/50-state-comparison-transfer-and-articulation/>

<sup>viii</sup> Community College Research Center. Tracking Transfer: State-by-State Outcomes. (Accessed 2024). <https://ccrc.tc.columbia.edu/tracking-transfer-state-outcomes.html>

Velasco, Tatiana, John Fink, Mariel Bedoya, Davis Jenkins, Tania LaViolet. Tracking Transfer: Four-Year Institutional Effectiveness in Broadening Bachelor's Degree Attainment. *Community College Research Center and Aspen Institute*. (2024). [https://highered.aspeninstitute.org/wp-content/uploads/2024/02/CCRC-ASP-NSCRC-TT-4Y-Report\\_Final.pdf](https://highered.aspeninstitute.org/wp-content/uploads/2024/02/CCRC-ASP-NSCRC-TT-4Y-Report_Final.pdf)

Whinnery, Erin and Lauren Peisach. 50-State Comparison: Transfer and Articulation Policies. *Education Commission of the States*. (2022). <https://www.ecs.org/50-state-comparison-transfer-and-articulation/>

<sup>ix</sup> Hodara, Michelle, Mary Martinez-Wenzl, David Stevens, and Christopher Mazzeo. Exploring Credit Mobility and Major-Specific Pathways: A Policy Analysis and Student Perspective on Community College to University Transfer. *Community College Review*. (2017).

Schudde, Lauren, Huriya Jabbar, Eliza Epstein, and Elif Yucel. Students' Sense Making of Higher Education Policies During the Vertical Transfer Process. *American Educational Research Journal*. (2021). <https://journals.sagepub.com/doi/pdf/10.3102/00028312211003050>

Whinnery, Erin and Lauren Peisach. 50-State Comparison: Transfer and Articulation Policies. *Education Commission of the States*. (2022). <https://www.ecs.org/50-state-comparison-transfer-and-articulation/>

<sup>x</sup> Hodara, Michelle, Mary Martinez-Wenzl, David Stevens, and Christopher Mazzeo. Exploring Credit Mobility and Major-Specific Pathways: A Policy Analysis and Student Perspective on Community College to University Transfer. *Community College Review*. (2017).

Schudde, Lauren, Huriya Jabbar, Eliza Epstein, and Elif Yucel. Students' Sense Making of Higher Education Policies During the Vertical Transfer Process. *American Educational Research Journal*. (2021). <https://journals.sagepub.com/doi/pdf/10.3102/00028312211003050>

Whinnery, Erin and Lauren Peisach. 50-State Comparison: Transfer and Articulation Policies. *Education Commission of the States*. (2022). <https://www.ecs.org/50-state-comparison-transfer-and-articulation/>

## MI Transfer Pathways: Are they Affordable and Navigable for Michiganders?

<sup>xi</sup> Velasco, Tatiana, John Fink, Mariel Bedoya, Davis Jenkins, Tania LaViolet. Tracking Transfer: Four-Year Institutional Effectiveness in Broadening Bachelor's Degree Attainment. *Community College Research Center and Aspen Institute*. (2024) [https://highered.aspeninstitute.org/wp-content/uploads/2024/02/CCRC-ASP-NSCRC-TT-4Y-Report\\_Final.pdf](https://highered.aspeninstitute.org/wp-content/uploads/2024/02/CCRC-ASP-NSCRC-TT-4Y-Report_Final.pdf)

<sup>xii</sup> Belfield, Clive R., John Fink, and Davis Jenkins. Is it Really Cheaper to Start at a Community College? The Consequences of Inefficient Transfer for Community College Students Seeking Bachelor's Degrees. *Community College Research Center at Teachers College, Columbia University*. (2017).

Carlson, Scott. "The Transfer Maze: How systematic snags too often block the path from community college to a bachelor's degree". *The Chronicle of Higher Education*. (2023). <https://www.chronicle.com/article/the-transfer-maze>

Giani, Matt. The Correlates of Credit Loss: How Demographics, Pre-Transfer Academics, and Institutions Relate to the Loss of Credits for Vertical Transfer Students. *Research in Higher Education*. (2019).

Hodara, Michelle, Mary Martinez-Wenzl, David Stevens, and Christopher Mazzeo. Exploring Credit Mobility and Major-Specific Pathways: A Policy Analysis and Student Perspective on Community College to University Transfer. *Community College Review*. (2017).

<sup>xiii</sup> Belfield, Clive R., John Fink, and Davis Jenkins. Is it Really Cheaper to Start at a Community College? The Consequences of Inefficient Transfer for Community College Students Seeking Bachelor's Degrees. *Community College Research Center at Teachers College, Columbia University*. (2017).

Binkley, Collin. "'Waste of Time': Community college transfers derail students". *The Associated Press*. (2023). <https://apnews.com/article/bachelor-degree-community-college-transfer-credits-cec0154f260c130fbbfcb593de77e4da>

Carlson, Scott. "The Transfer Maze: How systematic snags too often block the path from community college to a bachelor's degree". *The Chronicle of Higher Education*. (2023). <https://www.chronicle.com/article/the-transfer-maze>

Giani, Matt. The Correlates of Credit Loss: How Demographics, Pre-Transfer Academics, and Institutions Relate to the Loss of Credits for Vertical Transfer Students. *Research in Higher Education*. (2019).

Schudde, Lauren, Huriya Jabbar, Eliza Epstein, and Elif Yucel. Students' Sense Making of Higher Education Policies During the Vertical Transfer Process. *American Educational Research Journal*. (2021). <https://journals.sagepub.com/doi/pdf/10.3102/00028312211003050>

Witteveen, Dirk and Paul Attewell. The Vertical Transfer Penalty among Bachelor's Degree Graduates. *The Journal of Higher Education*. (2020). <https://www.tandfonline.com/doi/pdf/10.1080/00221546.2019.1609323>

<sup>xiv</sup> Belfield, Clive R., John Fink, and Davis Jenkins. Is it Really Cheaper to Start at a Community College? The Consequences of Inefficient Transfer for Community College Students Seeking Bachelor's Degrees. *Community College Research Center at Teachers College, Columbia University*. (2017).

Binkley, Collin. "'Waste of Time': Community college transfers derail students". *The Associated Press*. (2023). <https://apnews.com/article/bachelor-degree-community-college-transfer-credits-cec0154f260c130fbbfcb593de77e4da>

Carlson, Scott. "The Transfer Maze: How systematic snags too often block the path from community college to a bachelor's degree". *The Chronicle of Higher Education*. (2023). <https://www.chronicle.com/article/the-transfer-maze>

Giani, Matt. The Correlates of Credit Loss: How Demographics, Pre-Transfer Academics, and Institutions Relate to the Loss of Credits for Vertical Transfer Students. *Research in Higher Education*. (2019).

Schudde, Lauren, Huriya Jabbar, Eliza Epstein, and Elif Yucel. Students' Sense Making of Higher Education Policies During the Vertical Transfer Process. *American Educational Research Journal*. (2021). <https://journals.sagepub.com/doi/pdf/10.3102/00028312211003050>

Witteveen, Dirk and Paul Attewell. The Vertical Transfer Penalty among Bachelor's Degree Graduates. *The Journal of Higher Education*. (2020). <https://www.tandfonline.com/doi/pdf/10.1080/00221546.2019.1609323>

<sup>xv</sup> Belfield, Clive R., John Fink, and Davis Jenkins. Is it Really Cheaper to Start at a Community College? The Consequences of Inefficient Transfer for Community College Students Seeking Bachelor's Degrees. *Community College Research Center at Teachers College, Columbia University*. (2017).

Binkley, Collin. "'Waste of Time': Community college transfers derail students". *The Associated Press*. (2023). <https://apnews.com/article/bachelor-degree-community-college-transfer-credits-cec0154f260c130fbbfcb593de77e4da>

Carlson, Scott. "The Transfer Maze: How systematic snags too often block the path from community college to a bachelor's degree". *The Chronicle of Higher Education*. (2023). <https://www.chronicle.com/article/the-transfer-maze>

Giani, Matt. The Correlates of Credit Loss: How Demographics, Pre-Transfer Academics, and Institutions Relate to the Loss of Credits for Vertical Transfer Students. *Research in Higher Education*. (2019).

Schudde, Lauren, Huriya Jabbar, Eliza Epstein, and Elif Yucel. Students' Sense Making of Higher Education Policies During the Vertical Transfer Process. *American Educational Research Journal*. (2021). <https://journals.sagepub.com/doi/pdf/10.3102/00028312211003050>



## MI Transfer Pathways: Are they Affordable and Navigable for Michiganders?

Witteveen, Dirk and Paul Attewell. The Vertical Transfer Penalty among Bachelor's Degree Graduates. The Journal of Higher Education. (2020). <https://www.tandfonline.com/doi/pdf/10.1080/00221546.2019.1609323>

<sup>xvi</sup> Carlson, Scott. "The Transfer Maze: How systematic snags too often block the path from community college to a bachelor's degree". *The Chronicle of Higher Education*. (2023). <https://www.chronicle.com/article/the-transfer-maze>

Giani, Matt. The Correlates of Credit Loss: How Demographics, Pre-Transfer Academics, and Institutions Relate to the Loss of Credits for Vertical Transfer Students. *Research in Higher Education*. (2019).

Hodara, Michelle, Mary Martinez-Wenzl, David Stevens, and Christopher Mazzeo. Exploring Credit Mobility and Major-Specific Pathways: A Policy Analysis and Student Perspective on Community College to University Transfer. *Community College Review*. (2017).

<sup>xvii</sup> Belfield, Clive R., John Fink, and Davis Jenkins. Is it Really Cheaper to Start at a Community College? The Consequences of Inefficient Transfer for Community College Students Seeking Bachelor's Degrees. Community College Research Center at Teachers College, Columbia University. (2017).

Binkley, Collin. "'Waste of Time': Community college transfers derail students". The Associated Press. (2023). <https://apnews.com/article/bachelor-degree-community-college-transfer-credits-cec0154f260c130fbbfcb593de77e4da>

Carlson, Scott. "The Transfer Maze: How systematic snags too often block the path from community college to a bachelor's degree". *The Chronicle of Higher Education*. (2023). <https://www.chronicle.com/article/the-transfer-maze>

Giani, Matt. The Correlates of Credit Loss: How Demographics, Pre-Transfer Academics, and Institutions Relate to the Loss of Credits for Vertical Transfer Students. *Research in Higher Education*. (2019).

Schudde, Lauren, Huriya Jabbar, Eliza Epstein, and Elif Yucel. Students' Sense Making of Higher Education Policies During the Vertical Transfer Process. *American Educational Research Journal*. (2021). <https://journals.sagepub.com/doi/pdf/10.3102/00028312211003050>

Witteveen, Dirk and Paul Attewell. The Vertical Transfer Penalty among Bachelor's Degree Graduates. The Journal of Higher Education. (2020). <https://www.tandfonline.com/doi/pdf/10.1080/00221546.2019.1609323>

<sup>xviii</sup> Belfield, Clive R., John Fink, and Davis Jenkins. Is it Really Cheaper to Start at a Community College? The Consequences of Inefficient Transfer for Community College Students Seeking Bachelor's Degrees. Community College Research Center at Teachers College, Columbia University. (2017).

Binkley, Collin. "'Waste of Time': Community college transfers derail students". The Associated Press. (2023). <https://apnews.com/article/bachelor-degree-community-college-transfer-credits-cec0154f260c130fbbfcb593de77e4da>

Carlson, Scott. "The Transfer Maze: How systematic snags too often block the path from community college to a bachelor's degree". *The Chronicle of Higher Education*. (2023). <https://www.chronicle.com/article/the-transfer-maze>

Giani, Matt. The Correlates of Credit Loss: How Demographics, Pre-Transfer Academics, and Institutions Relate to the Loss of Credits for Vertical Transfer Students. *Research in Higher Education*. (2019).

Schudde, Lauren, Huriya Jabbar, Eliza Epstein, and Elif Yucel. Students' Sense Making of Higher Education Policies During the Vertical Transfer Process. *American Educational Research Journal*. (2021). [https://journals.sagepub.com/doi/pdf/10.3102/00028312211003050?casa\\_token=ej-EmDbpMSAAAAA:P5inTDvWzg8k1OnZGY0GasX54XJLwPPSwLmpDOmY0OmWguVVt7B0VBmgea2XFWFoYpCtAfEcij\\_s8](https://journals.sagepub.com/doi/pdf/10.3102/00028312211003050?casa_token=ej-EmDbpMSAAAAA:P5inTDvWzg8k1OnZGY0GasX54XJLwPPSwLmpDOmY0OmWguVVt7B0VBmgea2XFWFoYpCtAfEcij_s8)

Witteveen, Dirk and Paul Attewell. The Vertical Transfer Penalty among Bachelor's Degree Graduates. The Journal of Higher Education. (2020). <https://www.tandfonline.com/doi/pdf/10.1080/00221546.2019.1609323>

<sup>xix</sup> Belfield, Clive R., John Fink, and Davis Jenkins. Is it Really Cheaper to Start at a Community College? The Consequences of Inefficient Transfer for Community College Students Seeking Bachelor's Degrees. Community College Research Center at Teachers College, Columbia University. (2017).

Binkley, Collin. "'Waste of Time': Community college transfers derail students". The Associated Press. (2023). <https://apnews.com/article/bachelor-degree-community-college-transfer-credits-cec0154f260c130fbbfcb593de77e4da>

Carlson, Scott. "The Transfer Maze: How systematic snags too often block the path from community college to a bachelor's degree". *The Chronicle of Higher Education*. (2023). <https://www.chronicle.com/article/the-transfer-maze>

Giani, Matt. The Correlates of Credit Loss: How Demographics, Pre-Transfer Academics, and Institutions Relate to the Loss of Credits for Vertical Transfer Students. *Research in Higher Education*. (2019).

Schudde, Lauren, Huriya Jabbar, Eliza Epstein, and Elif Yucel. Students' Sense Making of Higher Education Policies During the Vertical Transfer Process. *American Educational Research Journal*. (2021). <https://journals.sagepub.com/doi/pdf/10.3102/00028312211003050>

Witteveen, Dirk and Paul Attewell. The Vertical Transfer Penalty among Bachelor's Degree Graduates. The Journal of Higher Education. (2020). <https://www.tandfonline.com/doi/pdf/10.1080/00221546.2019.1609323>



## MI Transfer Pathways: Are they Affordable and Navigable for Michiganders?

- <sup>xx</sup> Belfield, Clive R., John Fink, and Davis Jenkins. Is it Really Cheaper to Start at a Community College? The Consequences of Inefficient Transfer for Community College Students Seeking Bachelor's Degrees. Community College Research Center at Teachers College, Columbia University. (2017).
- Binkley, Collin. "'Waste of Time': Community college transfers derail students'. The Associated Press. (2023). <https://apnews.com/article/bachelor-degree-community-college-transfer-credits-cec0154f260c130fbbfcb593de77e4da>
- Carlson, Scott. "The Transfer Maze: How systematic snags too often block the path from community college to a bachelor's degree". The Chronicle of Higher Education. (2023). <https://www.chronicle.com/article/the-transfer-maze>
- Giani, Matt. The Correlates of Credit Loss: How Demographics, Pre-Transfer Academics, and Institutions Relate to the Loss of Credits for Vertical Transfer Students. Research in Higher Education. (2019).
- Schudde, Lauren, Huriya Jabbar, Eliza Epstein, and Elif Yucel. Students' Sense Making of Higher Education Policies During the Vertical Transfer Process. American Educational Research Journal. (2021). <https://journals.sagepub.com/doi/pdf/10.3102/00028312211003050>
- Witteveen, Dirk and Paul Attewell. The Vertical Transfer Penalty among Bachelor's Degree Graduates. The Journal of Higher Education. (2020). <https://www.tandfonline.com/doi/pdf/10.1080/00221546.2019.1609323>
- <sup>xxi</sup> Belfield, Clive R., John Fink, and Davis Jenkins. Is it Really Cheaper to Start at a Community College? The Consequences of Inefficient Transfer for Community College Students Seeking Bachelor's Degrees. Community College Research Center at Teachers College, Columbia University. (2017).
- Binkley, Collin. "'Waste of Time': Community college transfers derail students'. The Associated Press. (2023). <https://apnews.com/article/bachelor-degree-community-college-transfer-credits-cec0154f260c130fbbfcb593de77e4da>
- Carlson, Scott. "The Transfer Maze: How systematic snags too often block the path from community college to a bachelor's degree". The Chronicle of Higher Education. (2023). <https://www.chronicle.com/article/the-transfer-maze>
- Giani, Matt. The Correlates of Credit Loss: How Demographics, Pre-Transfer Academics, and Institutions Relate to the Loss of Credits for Vertical Transfer Students. Research in Higher Education. (2019).
- Schudde, Lauren, Huriya Jabbar, Eliza Epstein, and Elif Yucel. Students' Sense Making of Higher Education Policies During the Vertical Transfer Process. American Educational Research Journal. (2021). <https://journals.sagepub.com/doi/pdf/10.3102/00028312211003050>
- Witteveen, Dirk and Paul Attewell. The Vertical Transfer Penalty among Bachelor's Degree Graduates. The Journal of Higher Education. (2020). <https://www.tandfonline.com/doi/pdf/10.1080/00221546.2019.1609323>
- <sup>xxii</sup> Belfield, Clive R., John Fink, and Davis Jenkins. Is it Really Cheaper to Start at a Community College? The Consequences of Inefficient Transfer for Community College Students Seeking Bachelor's Degrees. Community College Research Center at Teachers College, Columbia University. (2017).
- Binkley, Collin. "'Waste of Time': Community college transfers derail students'. The Associated Press. (2023). <https://apnews.com/article/bachelor-degree-community-college-transfer-credits-cec0154f260c130fbbfcb593de77e4da>
- Carlson, Scott. "The Transfer Maze: How systematic snags too often block the path from community college to a bachelor's degree". The Chronicle of Higher Education. (2023). <https://www.chronicle.com/article/the-transfer-maze>
- Giani, Matt. The Correlates of Credit Loss: How Demographics, Pre-Transfer Academics, and Institutions Relate to the Loss of Credits for Vertical Transfer Students. Research in Higher Education. (2019).
- Schudde, Lauren, Huriya Jabbar, Eliza Epstein, and Elif Yucel. Students' Sense Making of Higher Education Policies During the Vertical Transfer Process. American Educational Research Journal. (2021). <https://journals.sagepub.com/doi/pdf/10.3102/00028312211003050>
- Witteveen, Dirk and Paul Attewell. The Vertical Transfer Penalty among Bachelor's Degree Graduates. The Journal of Higher Education. (2020). <https://www.tandfonline.com/doi/pdf/10.1080/00221546.2019.1609323>
- <sup>xxiii</sup> Belfield, Clive R., John Fink, and Davis Jenkins. Is it Really Cheaper to Start at a Community College? The Consequences of Inefficient Transfer for Community College Students Seeking Bachelor's Degrees. Community College Research Center at Teachers College, Columbia University. (2017).
- Binkley, Collin. "'Waste of Time': Community college transfers derail students'. The Associated Press. (2023). <https://apnews.com/article/bachelor-degree-community-college-transfer-credits-cec0154f260c130fbbfcb593de77e4da>
- Carlson, Scott. "The Transfer Maze: How systematic snags too often block the path from community college to a bachelor's degree". The Chronicle of Higher Education. (2023). <https://www.chronicle.com/article/the-transfer-maze>
- Schudde, Lauren, Huriya Jabbar, Eliza Epstein, and Elif Yucel. Students' Sense Making of Higher Education Policies During the Vertical Transfer Process. American Educational Research Journal. (2021). <https://journals.sagepub.com/doi/pdf/10.3102/00028312211003050>
- Sotherland, Nathan, Kevin Stange, and Jordan Matsudaira. New Measures of Postsecondary Education Transfer Performance: Transfer-out rates for community colleges, transfer student graduation rates at four-year colleges, and the institutional dyads contributing to transfer student success. Department

# MI Transfer Pathways: Are they Affordable and Navigable for Michiganders?

- of Education: Homeroom. (2023). <https://blog.ed.gov/2023/11/new-measures-of-postsecondary-education-transfer-performance-transfer-out-rates-for-community-colleges-transfer-student-graduation-rates-at-four-year-colleges-and-the-institutional-dyads-contributi/>
- Velasco, Tatiana, John Fink, Mariel Bedoya, Davis Jenkins, Tania LaViolet. Tracking Transfer: Four-Year Institutional Effectiveness in Broadening Bachelor's Degree Attainment. Community College Research Center and Aspen Institute. (2024). [https://highered.aspeninstitute.org/wp-content/uploads/2024/02/CCRC-ASP-NSCRC-TT-4Y-Report\\_Final.pdf](https://highered.aspeninstitute.org/wp-content/uploads/2024/02/CCRC-ASP-NSCRC-TT-4Y-Report_Final.pdf)
- Whinnery, Erin and Lauren Peisach. 50-State Comparison: Transfer and Articulation Policies. Education Commission of the States. (2022). <https://www.ecs.org/50-state-comparison-transfer-and-articulation/>
- <sup>xxiv</sup> National Student Clearinghouse. "Transfer and Progress". (2024) <https://nscresearchcenter.org/transfer-and-progress/>
- <sup>xxv</sup> National Student Clearinghouse. "Transfer and Progress". (2024) <https://nscresearchcenter.org/transfer-and-progress/>
- <sup>xxvi</sup> National Student Clearinghouse. "Transfer and Progress". (2024) <https://nscresearchcenter.org/transfer-and-progress/>
- <sup>xxvii</sup> National Student Clearinghouse. "Transfer and Progress". (2024) <https://nscresearchcenter.org/transfer-and-progress/>
- <sup>xxviii</sup> Aulck, Lovenoor, and Jevin West. Attrition and performance of community college transfers. PLoS ONE 12(4) (2017) <https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0174683#abstract0>
- Glynn, Jennifer. Persistence: The Success of Students Who Transfer from Community Colleges to Selective Four-Year Institutions. Jack Kent Cooke Foundation. (2019) <https://www.jkcf.org/research/persistence/#:~:text=Summary%20and%20Recommendations,-This%20report%20provides&text=Community%20college%20students%20who%20transfer%20to%20a%20selective%20institution%20are,or%20other%20four%20year%20institutions.>
- <sup>xxix</sup> Glynn, Jennifer. Persistence: The Success of Students Who Transfer from Community Colleges to Selective Four-Year Institutions. Jack Kent Cooke Foundation. (2019). <https://www.jkcf.org/research/persistence/#:~:text=Summary%20and%20Recommendations,-This%20report%20provides&text=Community%20college%20students%20who%20transfer%20to%20a%20selective%20institution%20are,or%20other%20four%20year%20institutions.>
- <sup>xxx</sup> Velasco, Tatiana, John Fink, Mariel Bedoya, Davis Jenkins, Tania LaViolet. Tracking Transfer: Four-Year Institutional Effectiveness in Broadening Bachelor's Degree Attainment. Community College Research Center and Aspen Institute. (2024). [https://highered.aspeninstitute.org/wp-content/uploads/2024/02/CCRC-ASP-NSCRC-TT-4Y-Report\\_Final.pdf](https://highered.aspeninstitute.org/wp-content/uploads/2024/02/CCRC-ASP-NSCRC-TT-4Y-Report_Final.pdf)
- <sup>xxxi</sup> Velasco, Tatiana, John Fink, Mariel Bedoya, Davis Jenkins, Tania LaViolet. Tracking Transfer: Four-Year Institutional Effectiveness in Broadening Bachelor's Degree Attainment. Community College Research Center and Aspen Institute. (2024). [https://highered.aspeninstitute.org/wp-content/uploads/2024/02/CCRC-ASP-NSCRC-TT-4Y-Report\\_Final.pdf](https://highered.aspeninstitute.org/wp-content/uploads/2024/02/CCRC-ASP-NSCRC-TT-4Y-Report_Final.pdf)
- <sup>xxxii</sup> Velasco, Tatiana, John Fink, Mariel Bedoya, Davis Jenkins, Tania LaViolet. Tracking Transfer: Four-Year Institutional Effectiveness in Broadening Bachelor's Degree Attainment. Community College Research Center and Aspen Institute. (2024). [https://highered.aspeninstitute.org/wp-content/uploads/2024/02/CCRC-ASP-NSCRC-TT-4Y-Report\\_Final.pdf](https://highered.aspeninstitute.org/wp-content/uploads/2024/02/CCRC-ASP-NSCRC-TT-4Y-Report_Final.pdf)
- <sup>xxxiii</sup> Belfield, Clive R., John Fink, and Davis Jenkins. Is it Really Cheaper to Start at a Community College? The Consequences of Inefficient Transfer for Community College Students Seeking Bachelor's Degrees. Community College Research Center at Teachers College, Columbia University. (2017).
- Binkley, Collin. "'Waste of Time': Community college transfers derail students'. The Associated Press. (2023). <https://apnews.com/article/bachelor-degree-community-college-transfer-credits-cec0154f260c130fbbfcb593de77e4da>
- Carlson, Scott. "The Transfer Maze: How systematic snags too often block the path from community college to a bachelor's degree". The Chronicle of Higher Education. (2023). <https://www.chronicle.com/article/the-transfer-maze>
- Schudde, Lauren, Huriya Jabbar, Eliza Epstein, and Elif Yucel. Students' Sense Making of Higher Education Policies During the Vertical Transfer Process. American Educational Research Journal. (2021). <https://journals.sagepub.com/doi/pdf/10.3102/00028312211003050>
- Sotherland, Nathan, Kevin Stange, and Jordan Matsudaira. New Measures of Postsecondary Education Transfer Performance: Transfer-out rates for community colleges, transfer student graduation rates at four-year colleges, and the institutional dyads contributing to transfer student success. Department of Education: Homeroom. (2023). <https://blog.ed.gov/2023/11/new-measures-of-postsecondary-education-transfer-performance-transfer-out-rates-for-community-colleges-transfer-student-graduation-rates-at-four-year-colleges-and-the-institutional-dyads-contributi/>
- Velasco, Tatiana, John Fink, Mariel Bedoya, Davis Jenkins, Tania LaViolet. Tracking Transfer: Four-Year Institutional Effectiveness in Broadening Bachelor's Degree Attainment. Community College Research Center and Aspen Institute. (2024). [https://highered.aspeninstitute.org/wp-content/uploads/2024/02/CCRC-ASP-NSCRC-TT-4Y-Report\\_Final.pdf](https://highered.aspeninstitute.org/wp-content/uploads/2024/02/CCRC-ASP-NSCRC-TT-4Y-Report_Final.pdf)
- Whinnery, Erin and Lauren Peisach. 50-State Comparison: Transfer and Articulation Policies. Education Commission of the States. (2022). <https://www.ecs.org/50-state-comparison-transfer-and-articulation/>

## MI Transfer Pathways: Are they Affordable and Navigable for Michiganders?

<sup>xxxiv</sup> Belfield, Clive R., John Fink, and Davis Jenkins. Is it Really Cheaper to Start at a Community College? The Consequences of Inefficient Transfer for Community College Students Seeking Bachelor's Degrees. Community College Research Center at Teachers College, Columbia University. (2017).

Hu, Xiaodan, Justin C. Ortagus, & Dennis A. Kramer II. The Community College Pathway: An Analysis of the Costs Associated with Enrolling Initially at a Community College Before Transferring to a 4-Year Institution. Higher Education Policy. (2017). <https://link.springer.com/article/10.1057/s41307-017-0063-7>

Gonzalez Canche, Manuel S. Community College Students Who Attained a 4-Year Degree Accrued Lower Student Loan Debt than 4-Year Entrants Over 2 Decades: Is a 10 Percent Debt Accumulation Reduction Worth the Added "Risk"? If So, for Whom? Research in Higher Education. (2019). <https://link.springer.com/article/10.1007/s11162-019-09565-9>

<sup>xxxv</sup> Belfield, Clive R., John Fink, and Davis Jenkins. Is it Really Cheaper to Start at a Community College? The Consequences of Inefficient Transfer for Community College Students Seeking Bachelor's Degrees. Community College Research Center at Teachers College, Columbia University. (2017).

Hu, Xiaodan, Justin C. Ortagus, & Dennis A. Kramer II. The Community College Pathway: An Analysis of the Costs Associated with Enrolling Initially at a Community College Before Transferring to a 4-Year Institution. Higher Education Policy. (2017). <https://link.springer.com/article/10.1057/s41307-017-0063-7>

Spencer, George. The Costs of Time: Examining the Extent of the Credit Loss Penalty in College Transfer. The Journal of Higher Education. (2023). <https://www.tandfonline.com/doi/pdf/10.1080/00221546.2022.2141453>

<sup>xxxvi</sup> Belfield, Clive R., John Fink, and Davis Jenkins. Is it Really Cheaper to Start at a Community College? The Consequences of Inefficient Transfer for Community College Students Seeking Bachelor's Degrees. Community College Research Center at Teachers College, Columbia University. (2017).

Giani, Matt. The Correlates of Credit Loss: How Demographics, Pre-Transfer Academics, and Institutions Relate to the Loss of Credits for Vertical Transfer Students. Research in Higher Education. (2019).

Hu, Xiaodan, Justin C. Ortagus, & Dennis A. Kramer II. The Community College Pathway: An Analysis of the Costs Associated with Enrolling Initially at a Community College Before Transferring to a 4-Year Institution. Higher Education Policy. (2017). <https://link.springer.com/article/10.1057/s41307-017-0063-7>

Spencer, George. The Costs of Time: Examining the Extent of the Credit Loss Penalty in College Transfer. The Journal of Higher Education. (2023). <https://www.tandfonline.com/doi/pdf/10.1080/00221546.2022.2141453>

<sup>xxxvii</sup> Belfield, Clive R., John Fink, and Davis Jenkins. Is it Really Cheaper to Start at a Community College? The Consequences of Inefficient Transfer for Community College Students Seeking Bachelor's Degrees. Community College Research Center at Teachers College, Columbia University. (2017).

Hu, Xiaodan, Justin C. Ortagus, & Dennis A. Kramer II. The Community College Pathway: An Analysis of the Costs Associated with Enrolling Initially at a Community College Before Transferring to a 4-Year Institution. Higher Education Policy. (2017). <https://link.springer.com/article/10.1057/s41307-017-0063-7>

Giani, Matt. The Correlates of Credit Loss: How Demographics, Pre-Transfer Academics, and Institutions Relate to the Loss of Credits for Vertical Transfer Students. Research in Higher Education. (2019).

Gonzalez Canche, Manuel S. Community College Students Who Attained a 4-Year Degree Accrued Lower Student Loan Debt than 4-Year Entrants Over 2 Decades: Is a 10 Percent Debt Accumulation Reduction Worth the Added "Risk"? If So, for Whom? Research in Higher Education. (2019). <https://link.springer.com/article/10.1007/s11162-019-09565-9>

Spencer, George. The Costs of Time: Examining the Extent of the Credit Loss Penalty in College Transfer. The Journal of Higher Education. (2023). <https://www.tandfonline.com/doi/pdf/10.1080/00221546.2022.2141453>

<sup>xxxviii</sup> Belfield, Clive R., John Fink, and Davis Jenkins. Is it Really Cheaper to Start at a Community College? The Consequences of Inefficient Transfer for Community College Students Seeking Bachelor's Degrees. Community College Research Center at Teachers College, Columbia University. (2017).

<sup>xxxix</sup> Hu, Xiaodan, Justin C. Ortagus, & Dennis A. Kramer II. The Community College Pathway: An Analysis of the Costs Associated with Enrolling Initially at a Community College Before Transferring to a 4-Year Institution. Higher Education Policy. (2017). <https://link.springer.com/article/10.1057/s41307-017-0063-7>

Gonzalez Canche, Manuel S. Community College Students Who Attained a 4-Year Degree Accrued Lower Student Loan Debt than 4-Year Entrants Over 2 Decades: Is a 10 Percent Debt Accumulation Reduction Worth the Added "Risk"? If So, for Whom? Research in Higher Education. (2019). <https://link.springer.com/article/10.1007/s11162-019-09565-9>

Spencer, George. The Costs of Time: Examining the Extent of the Credit Loss Penalty in College Transfer. The Journal of Higher Education. (2023). <https://www.tandfonline.com/doi/pdf/10.1080/00221546.2022.2141453>

<sup>xl</sup> Belfield, Clive R., John Fink, and Davis Jenkins. Is it Really Cheaper to Start at a Community College? The Consequences of Inefficient Transfer for Community College Students Seeking Bachelor's Degrees. Community College Research Center at Teachers College, Columbia University. (2017).

Binkley, Collin. "'Waste of Time': Community college transfers derail students'. The Associated Press. (2023). <https://apnews.com/article/bachelor-degree-community-college-transfer-credits-cec0154f260c130fbfcb593de77e4da>

## MI Transfer Pathways: Are they Affordable and Navigable for Michiganders?

Carlson, Scott. "The Transfer Maze: How systematic snags too often block the path from community college to a bachelor's degree". *The Chronicle of Higher Education*. (2023). <https://www.chronicle.com/article/the-transfer-maze>

Giani, Matt. *The Correlates of Credit Loss: How Demographics, Pre-Transfer Academics, and Institutions Relate to the Loss of Credits for Vertical Transfer Students*. Research in Higher Education. (2019).

Schudde, Lauren, Huriya Jabbar, Eliza Epstein, and Elif Yucel. *Students' Sense Making of Higher Education Policies During the Vertical Transfer Process*. *American Educational Research Journal*. (2021). <https://journals.sagepub.com/doi/pdf/10.3102/00028312211003050>

Witteveen, Dirk and Paul Attewell. *The Vertical Transfer Penalty among Bachelor's Degree Graduates*. *The Journal of Higher Education*. (2020). <https://www.tandfonline.com/doi/pdf/10.1080/00221546.2019.1609323>

<sup>xli</sup> Belfield, Clive R., John Fink, and Davis Jenkins. *Is it Really Cheaper to Start at a Community College? The Consequences of Inefficient Transfer for Community College Students Seeking Bachelor's Degrees*. Community College Research Center at Teachers College, Columbia University. (2017).

Binkley, Collin. "'Waste of Time': Community college transfers derail students". *The Associated Press*. (2023). <https://apnews.com/article/bachelor-degree-community-college-transfer-credits-cec0154f260c130fbbfcb593de77e4da>

Carlson, Scott. "The Transfer Maze: How systematic snags too often block the path from community college to a bachelor's degree". *The Chronicle of Higher Education*. (2023). <https://www.chronicle.com/article/the-transfer-maze>

Giani, Matt. *The Correlates of Credit Loss: How Demographics, Pre-Transfer Academics, and Institutions Relate to the Loss of Credits for Vertical Transfer Students*. Research in Higher Education. (2019).

Schudde, Lauren, Huriya Jabbar, Eliza Epstein, and Elif Yucel. *Students' Sense Making of Higher Education Policies During the Vertical Transfer Process*. *American Educational Research Journal*. (2021). <https://journals.sagepub.com/doi/pdf/10.3102/00028312211003050>

Witteveen, Dirk and Paul Attewell. *The Vertical Transfer Penalty among Bachelor's Degree Graduates*. *The Journal of Higher Education*. (2020). <https://www.tandfonline.com/doi/pdf/10.1080/00221546.2019.1609323>

<sup>xlii</sup> Belfield, Clive R., John Fink, and Davis Jenkins. *Is it Really Cheaper to Start at a Community College? The Consequences of Inefficient Transfer for Community College Students Seeking Bachelor's Degrees*. Community College Research Center at Teachers College, Columbia University. (2017).

Binkley, Collin. "'Waste of Time': Community college transfers derail students". *The Associated Press*. (2023). <https://apnews.com/article/bachelor-degree-community-college-transfer-credits-cec0154f260c130fbbfcb593de77e4da>

Carlson, Scott. "The Transfer Maze: How systematic snags too often block the path from community college to a bachelor's degree". *The Chronicle of Higher Education*. (2023). <https://www.chronicle.com/article/the-transfer-maze>

Giani, Matt. *The Correlates of Credit Loss: How Demographics, Pre-Transfer Academics, and Institutions Relate to the Loss of Credits for Vertical Transfer Students*. Research in Higher Education. (2019).

Schudde, Lauren, Huriya Jabbar, Eliza Epstein, and Elif Yucel. *Students' Sense Making of Higher Education Policies During the Vertical Transfer Process*. *American Educational Research Journal*. (2021). <https://journals.sagepub.com/doi/pdf/10.3102/00028312211003050>

Witteveen, Dirk and Paul Attewell. *The Vertical Transfer Penalty among Bachelor's Degree Graduates*. *The Journal of Higher Education*. (2020). <https://www.tandfonline.com/doi/pdf/10.1080/00221546.2019.1609323>

<sup>xliii</sup> Velasco, Tatiana, John Fink, Mariel Bedoya, Davis Jenkins, Tania LaViolet. *Tracking Transfer: Four-Year Institutional Effectiveness in Broadening Bachelor's Degree Attainment*. *Community College Research Center and Aspen Institute*. (2024) [https://highered.aspeninstitute.org/wp-content/uploads/2024/02/CCRC-ASP-NSCRC-TT-4Y-Report\\_Final.pdf](https://highered.aspeninstitute.org/wp-content/uploads/2024/02/CCRC-ASP-NSCRC-TT-4Y-Report_Final.pdf)

<sup>xliv</sup> Velasco, Tatiana, John Fink, Mariel Bedoya, Davis Jenkins, Tania LaViolet. *Tracking Transfer: Four-Year Institutional Effectiveness in Broadening Bachelor's Degree Attainment*. *Community College Research Center and Aspen Institute*. (2024) [https://highered.aspeninstitute.org/wp-content/uploads/2024/02/CCRC-ASP-NSCRC-TT-4Y-Report\\_Final.pdf](https://highered.aspeninstitute.org/wp-content/uploads/2024/02/CCRC-ASP-NSCRC-TT-4Y-Report_Final.pdf)

<sup>xlv</sup> Carlson, Scott. "The Transfer Maze: How systematic snags too often block the path from community college to a bachelor's degree". *The Chronicle of Higher Education*. (2023) <https://www.chronicle.com/article/the-transfer-maze>

Giani, Matt. *The Correlates of Credit Loss: How Demographics, Pre-Transfer Academics, and Institutions Relate to the Loss of Credits for Vertical Transfer Students*. Research in Higher Education. (2019).

Hodara, Michelle, Mary Martinez-Wenzl, David Stevens, and Christopher Mazzeo. *Exploring Credit Mobility and Major-Specific Pathways: A Policy Analysis and Student Perspective on Community College to University Transfer*. *Community College Review*. (2017).

Schudde, Lauren, Huriya Jabbar, Eliza Epstein, and Elif Yucel. *Students' Sense Making of Higher Education Policies During the Vertical Transfer Process*. *American Educational Research Journal*. (2021). <https://journals.sagepub.com/doi/pdf/10.3102/00028312211003050>

## MI Transfer Pathways: Are they Affordable and Navigable for Michiganders?

Whinnery, Erin and Lauren Peisach. 50-State Comparison: Transfer and Articulation Policies. Education Commission of the States. (2022). <https://www.ecs.org/50-state-comparison-transfer-and-articulation/>

<sup>xlvi</sup> Whinnery, Erin and Lauren Peisach. 50-State Comparison: Transfer and Articulation Policies. Education Commission of the States. (2022). <https://www.ecs.org/50-state-comparison-transfer-and-articulation/>

<sup>xlvii</sup> Whinnery, Erin and Lauren Peisach. 50-State Comparison: Transfer and Articulation Policies. Education Commission of the States. (2022). <https://www.ecs.org/50-state-comparison-transfer-and-articulation/>

<sup>xlviii</sup> Whinnery, Erin and Lauren Peisach. 50-State Comparison: Transfer and Articulation Policies. Education Commission of the States. (2022). <https://www.ecs.org/50-state-comparison-transfer-and-articulation/>

<sup>xlix</sup> Giani, Matt. The Correlates of Credit Loss: How Demographics, Pre-Transfer Academics, and Institutions Relate to the Loss of Credits for Vertical Transfer Students. *Research in Higher Education*. (2019).

Gross, Bethany and Dan Goldhaber. Community College Transfer and Articulation Policies: Looking Beneath the Surface. Center on Reinventing Public Education at the University of Washington Bothell. (2009) [https://crpe.org/wp-content/uploads/wp\\_crpe1R\\_cc2\\_apr09\\_0.pdf](https://crpe.org/wp-content/uploads/wp_crpe1R_cc2_apr09_0.pdf)

Hodara, Michelle, Mary Martinez-Wenzl, David Stevens, and Christopher Mazzeo. Exploring Credit Mobility and Major-Specific Pathways: A Policy Analysis and Student Perspective on Community College to University Transfer. *Community College Review*. (2017).

Schudde, Lauren, Huriya Jabbar, Eliza Epstein, and Elif Yucel. Students' Sense Making of Higher Education Policies During the Vertical Transfer Process. *American Educational Research Journal*. (2021). <https://journals.sagepub.com/doi/pdf/10.3102/00028312211003050>

<sup>i</sup> Gross, Bethany and Dan Goldhaber. Community College Transfer and Articulation Policies: Looking Beneath the Surface. Center on Reinventing Public Education at the University of Washington Bothell. (2009) [https://crpe.org/wp-content/uploads/wp\\_crpe1R\\_cc2\\_apr09\\_0.pdf](https://crpe.org/wp-content/uploads/wp_crpe1R_cc2_apr09_0.pdf)

<sup>ii</sup> Giani, Matt. The Correlates of Credit Loss: How Demographics, Pre-Transfer Academics, and Institutions Relate to the Loss of Credits for Vertical Transfer Students. *Research in Higher Education*. (2019).

Hodara, Michelle, Mary Martinez-Wenzl, David Stevens, and Christopher Mazzeo. Exploring Credit Mobility and Major-Specific Pathways: A Policy Analysis and Student Perspective on Community College to University Transfer. *Community College Review*. (2017).

Schudde, Lauren, Huriya Jabbar, Eliza Epstein, and Elif Yucel. Students' Sense Making of Higher Education Policies During the Vertical Transfer Process. *American Educational Research Journal*. (2021). <https://journals.sagepub.com/doi/pdf/10.3102/00028312211003050>

Spencer, George. The Costs of Time: Examining the Extent of the Credit Loss Penalty in College Transfer. *The Journal of Higher Education*. (2023). <https://www.tandfonline.com/doi/pdf/10.1080/00221546.2022.2141453>

<sup>iii</sup> Binkley, Collin. "'Waste of Time': Community college transfers derail students'. The Associated Press. (2023). <https://apnews.com/article/bachelor-degree-community-college-transfer-credits-cec0154f260c130fbbfcb593de77e4da>

Carlson, Scott. "The Transfer Maze: How systematic snags too often block the path from community college to a bachelor's degree". *The Chronicle of Higher Education*. (2023). <https://www.chronicle.com/article/the-transfer-maze>

Schudde, Lauren, Huriya Jabbar, Eliza Epstein, and Elif Yucel. Students' Sense Making of Higher Education Policies During the Vertical Transfer Process. *American Educational Research Journal*. (2021). <https://journals.sagepub.com/doi/pdf/10.3102/00028312211003050>

<sup>iiii</sup> MI School Data. College Transfer: 2022-2023 Data. Retrieved 2024. <https://www.mischooldata.org/college-transfer/>

<sup>liv</sup> MI School Data. College Transfer: 2022-2023 Data. Retrieved 2024. <https://www.mischooldata.org/college-transfer/>

<sup>lv</sup> MI School Data. College Transfer: 2022-2023 Data. Retrieved 2024. <https://www.mischooldata.org/college-transfer/>

<sup>lvi</sup> Velasco, Tatiana, John Fink, Mariel Bedoya, Davis Jenkins, Tania LaViolet. Tracking Transfer: Four-Year Institutional Effectiveness in Broadening Bachelor's Degree Attainment. *Community College Research Center and Aspen Institute*. (2024) [https://highered.aspeninstitute.org/wp-content/uploads/2024/02/CCRC-ASP-NSCRC-TT-4Y-Report\\_Final.pdf](https://highered.aspeninstitute.org/wp-content/uploads/2024/02/CCRC-ASP-NSCRC-TT-4Y-Report_Final.pdf)

Community College Research Center. Tracking Transfer: State-by-State Outcomes. (Accessed 2024). <https://ccrc.tc.columbia.edu/tracking-transfer-state-outcomes.html>

<sup>lvii</sup> Velasco, Tatiana, John Fink, Mariel Bedoya, Davis Jenkins, Tania LaViolet. Tracking Transfer: Four-Year Institutional Effectiveness in Broadening Bachelor's Degree Attainment. *Community College Research Center and Aspen Institute*. (2024) [https://highered.aspeninstitute.org/wp-content/uploads/2024/02/CCRC-ASP-NSCRC-TT-4Y-Report\\_Final.pdf](https://highered.aspeninstitute.org/wp-content/uploads/2024/02/CCRC-ASP-NSCRC-TT-4Y-Report_Final.pdf)

<sup>lviii</sup> Velasco, Tatiana, John Fink, Mariel Bedoya, Davis Jenkins, Tania LaViolet. Tracking Transfer: Four-Year Institutional Effectiveness in Broadening Bachelor's Degree Attainment. *Community College Research Center and Aspen Institute*. (2024) [https://highered.aspeninstitute.org/wp-content/uploads/2024/02/CCRC-ASP-NSCRC-TT-4Y-Report\\_Final.pdf](https://highered.aspeninstitute.org/wp-content/uploads/2024/02/CCRC-ASP-NSCRC-TT-4Y-Report_Final.pdf)



## MI Transfer Pathways: Are they Affordable and Navigable for Michiganders?

<sup>lix</sup> Velasco, Tatiana, John Fink, Mariel Bedoya, Davis Jenkins, Tania LaViolet. Tracking Transfer: Four-Year Institutional Effectiveness in Broadening Bachelor's Degree Attainment. *Community College Research Center and Aspen Institute*. (2024) [https://highered.aspeninstitute.org/wp-content/uploads/2024/02/CCRC-ASP-NSCRC-TT-4Y-Report\\_Final.pdf](https://highered.aspeninstitute.org/wp-content/uploads/2024/02/CCRC-ASP-NSCRC-TT-4Y-Report_Final.pdf)

Community College Research Center. Tracking Transfer: State-by-State Outcomes. (Accessed 2024). <https://ccrc.tc.columbia.edu/tracking-transfer-state-outcomes.html>

<sup>lx</sup> Velasco, Tatiana, John Fink, Mariel Bedoya, Davis Jenkins, Tania LaViolet. Tracking Transfer: Four-Year Institutional Effectiveness in Broadening Bachelor's Degree Attainment. *Community College Research Center and Aspen Institute*. (2024) [https://highered.aspeninstitute.org/wp-content/uploads/2024/02/CCRC-ASP-NSCRC-TT-4Y-Report\\_Final.pdf](https://highered.aspeninstitute.org/wp-content/uploads/2024/02/CCRC-ASP-NSCRC-TT-4Y-Report_Final.pdf)

Community College Research Center. Tracking Transfer: State-by-State Outcomes. (Accessed 2024). <https://ccrc.tc.columbia.edu/tracking-transfer-state-outcomes.html>

<sup>lxi</sup> Velasco, Tatiana, John Fink, Mariel Bedoya, Davis Jenkins, Tania LaViolet. Tracking Transfer: Four-Year Institutional Effectiveness in Broadening Bachelor's Degree Attainment. *Community College Research Center and Aspen Institute*. (2024) [https://highered.aspeninstitute.org/wp-content/uploads/2024/02/CCRC-ASP-NSCRC-TT-4Y-Report\\_Final.pdf](https://highered.aspeninstitute.org/wp-content/uploads/2024/02/CCRC-ASP-NSCRC-TT-4Y-Report_Final.pdf)

<sup>lxii</sup> MI Transfer Network. Transfer Your Associate Degree. (Accessed 2024). <https://www.mitransfer.org/transfer-your-associates-degree>

Whinnery, Erin and Lauren Peisach. 50-State Comparison: Transfer and Articulation Policies. *Education Commission of the States*. (2022). <https://www.ecs.org/50-state-comparison-transfer-and-articulation/>

<sup>lxiii</sup> MI Transfer Network. Transfer Your Associate Degree. (Accessed 2024). <https://www.mitransfer.org/transfer-your-associates-degree>

Whinnery, Erin and Lauren Peisach. 50-State Comparison: Transfer and Articulation Policies. *Education Commission of the States*. (2022). <https://www.ecs.org/50-state-comparison-transfer-and-articulation/>

<sup>lxiv</sup> MI Transfer Network. MiTransfer & MiWorkforce Pathways. (Accessed 2024). <https://www.mitransfer.org/mitransfer-miworkforce-pathways>

<sup>lxv</sup> MI Transfer Network. MiTransfer & MiWorkforce Pathways. (Accessed 2024). <https://www.mitransfer.org/mitransfer-miworkforce-pathways>

<sup>lxvi</sup> Whinnery, Erin and Lauren Peisach. 50-State Comparison: Transfer and Articulation Policies. *Education Commission of the States*. (2022). <https://www.ecs.org/50-state-comparison-transfer-and-articulation/>

<sup>lxvii</sup> University of Michigan - Dearborn. Learn4ward' to a Michigan degree. (Accessed 2024). <https://umdearborn.edu/news/learn4ward-michigan-degree>

<sup>lxviii</sup> Henry Ford College. Learn4ward: Guaranteed transfer to Eastern Michigan University. (Accessed 2024). <https://www.hfcc.edu/learn4ward/eastern-michigan-university>

<sup>lxix</sup> Worth, Sheridan. New Articulation Agreements Between Lake Superior State University (LSSU) And Northwestern Michigan College (NMC) Open Pathways For Engineering Success. *Lake Superior State University*. (2024). <https://www.lssu.edu/news/new-articulation-agreements-between-lake-superior-state-university-lssu-and-northwestern-michigan-college-nmc-open-pathways-for-engineering-success/#:~:text=Most%20notably%2C%20these%20agreements%20enable,Superior%20State%20Interim%20President%2C%20Dr.>

<sup>lxx</sup> Sotherland, Nathan, Kevin Stange, and Jordan Matsudaira. New Measures of Postsecondary Education Transfer Performance: Transfer-out rates for community colleges, transfer student graduation rates at four-year colleges, and the institutional dyads contributing to transfer student success. *Department of Education: Homeroom*. (2023). <https://blog.ed.gov/2023/11/new-measures-of-postsecondary-education-transfer-performance-transfer-out-rates-for-community-colleges-transfer-student-graduation-rates-at-four-year-colleges-and-the-institutional-dyads-contributi/>